

Sanitized Copy Approved for Release 2011/04/08:

CIA-RDP81-00280R000200160007-2

KOVALENKOV: ON HIS SEVENTIETH BIRTHDAY

Vestnik Svyasi Communications Herald/, No 4, 1954, Moscow, inside back cover

V. S. Kulebakin, Active Member, Academy of Sciences USSR

The twenty-fifth of March 1954 marks the seventieth birthday of one of the greatest Soviet scientists in the field of electric communication, the venerable teacher, doctor of technical sciences, professor, honored scientist and engineer, Major General of the engineering-technical service, associate member of the Academy of Sciences USSR, Valentiz Ivanovich Kovalenkov.

V. I. Kovalenkov was born in the village of Meshnik (Novogorod Province) in the family of a rural teacher.

Completing the course at the electrotechnical institute in Peterburg in 1909, he received a medal for successful defense of his diploma thesis. His name was listed on the marble plaque of the institute. Planning to do serious scientific work, Valentin Ivanovich entered the Physicomathemetical department of St. Peterburg University, where he completed his course in 1911. In 1914 he defended adissertation in applying for the scientific degree of associate professor. For this dissertation work he was awarded the A. S. Popov prise and was awarded an honorable mention by the Academy of Sciences.

Since his student days up to the present time, V. I. Kovalenkov has been carrying on extensive scientific and scientific-organizational activities. His inventive activity, experimental and theoretical work in the field of long-distance telephonic and telegraphic communication have blazed new paths of development in the science and engineering of communication. At the same time they have determined the busic trends of the development of these branches of electric communication in the Soviet Union. His work exerted also a substantial effect on the development of radio engineering, automatics, telemechanics, and sound film.

In his first basic work <u>Ustanavlivayushchiyesya</u> protsessy i rasprostraneniye preryvistogo toka po telegrafnym provodam /Steady State Processes and Propagation of Intermittent Current over Telegraph Wires published in 2 volumes in 1911-1913, the scientist investigated in detail the propagation of intermittent current along telegraph wires and showed the need for decreasing the diameter of telegraph wires from 6 to 5 mm, which was of great economic significance.

In 1915 V. I. Kovalenkov demonstrated an operating vacuum-tube telephone repeater circuit, the development of which he started in 1909. The practical realisation of the results of these investigations and inventions, which are of tremendous importance, became possible only after the Great October Socialist Revolution.

Valentin Ivanovich was the first to produce in the USSR in 1921 a model installation for multiplex high-frequency telephony for 3 conversations, which made it possible to proceed towards a practical development of this equipment.

The scientist paid particular attention to the problems of the development of theory of electric communication and of magnetic circuits. The results of his theoretical and experimental investigations in this field are reported in many books and articles published since 1911. In

these books and articles, many of the problems were first solved by him.

The scientific works of V. I. Kovalenkov, published during Soviet times, are well known to a large circle of specialists. His books Telefonirovaniye na bol*ehiye resstoyaniya Long Distance Telephony/ (1924) and Teoriya telegrafno-teleformov peredachy Theory of Telegraph-Telephone Transmission/ (1926) played an important role in the development of the theory and practice of electric communication and in the preparation of highly-qualified Soviet specialists in this field.

For the development of the theory of magnetic circuits and its application to the analysis of relay schemes, and also for a 2-volume book called <u>Teoriya peredachi po liniyam elektrosvyasi</u> Theory of Transmission over <u>Electric-Communication Lines</u> V. I. Kovalenkov was awarded the Stalin prise in 1941.

Valentin Ivanovich was known for his scientific work not only in the field of electric communication. He is the inventor of sound film: he was the first to produce a demonstration of sound motion-picture film. The principal schemes for recording and reproducing sound, which were developed by him, are employed to the present time in a system of sound-motion-picture apparatus. He also carried out many interesting investigations in the field of acoustics.

In 1939 V. I. Kovalenkov was elected an associate member of the Academy of Sciences USSR. Within the year he was appointed deputy director of the Institute of Automatics and Telemechanics of the Academy of Sciences USSR for the scientific section, and in 1942 he became the director of that institute. Since 1948 he has been in charge of the Laboratory for the Solution of Scientific Problems of Wire Communication of the Academy of Sciences USSR.

During his 45 years of activity in the field of electric communication the scientist published 35 monographs and more than 150 articles. In addition, he wrote many articles of a popular-scientific character. He was awarded 76 patents and inventor's certificates for inventions in the field of wire and radio communications, vacuum tubes, sound motion pictures, etc.

During his many years of activity as a professor and teacher V lentin Ivanovich trained a large number of engineers and scientific workers in the field of telephonic and telegraphic communication. Many of his students are great scientists and statesmen in the Soviet Union.

For outstanding service to the fatherland, V. I. Kevalenkov was awarded 2 Orders of Lenin, the Order of Labor Red Banner, the Order of the Red Star, and several medals.

With his tireless labor and tactful relationship to people, Valentin Ivancvich has won deserved respect and affection by large circles of communication workers.

4 4 #